The Sustainable Buildings Industry Council's

Designing Low-Energy Buildings with Energy-10™ Workshop

Save the date! **May 20–21, 2005 ■ Pittsburgh, PA**

Hosted by the University of Pittsburgh's Department of Civil and Environmental Engineering

Agenda

May 20

8:30 a.m.	Registration
9:00 a.m.	Introduction and Review of Handout Materials
9:30 a.m.	Module One: How Buildings Use Energy
10:30 a.m.	Break
10:45 a.m.	*Energy-10™* Design Process
12:00 p.m.	Lunch Break
1:00 p.m.	Module Two: Form and Envelope ■ Insulation ■ Air leakage control ■ Glazing
2:30 p.m.	Break
2:45 p.m.	Module Three: Form and Envelope, continued ■ Thermal mass ■ Passive solar heating
4:15 p.m.	Begin Case Application Exercise

May 21

8:30 a.m.	Coffee
9:00 a.m.	Module Four: Lighting Systems ■ Daylighting ■ Shading
10:30 a.m.	Break
10:45 a.m.	Module Five: Lighting Systems, continued ■ Energy Efficient Lighting and Controls
12:00 p.m.	Lunch Break
1:00 p.m.	Module Six: HVAC Systems ■ High Efficiency HVAC ■ HVAC Controls ■ Economizer Cycle ■ Natural Ventilation ■ Exhaust Air Heat Recovery ■ Evaporative Cooling ■ Solar Hot Water Heating
3:00 p.m.	Break
3:15 p.m.	Finalize Case Application Exercise
4:30 p.m.	Adjourn

Energy-10™ is an award-winning, PC-based design tool that helps architects and building designers quickly identify the most cost-effective, energy-saving measures for small commercial and residential buildings. *Energy-10™* can identify the best combination of energy-efficient strategies, including daylighting, passive solar heating, and high-efficiency mechanical systems. Using *Energy-10™* at a project's start takes less than an hour and can result in energy savings of 40 to 70 percent, with little or no increase in construction cost.

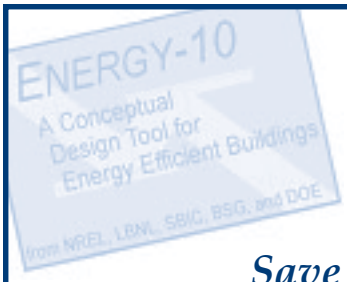
Energy-10™ is used for designing low-energy buildings. It enables designers to make good decisions about energy efficiency early in the design process. *Energy-10™* was developed with a building industry task force that included architects, engineers, builders, and utility representatives. The program is geared toward buildings of 10,000 square feet or less.

Join us for an information-packed, hands-on training session that will provide you with a working knowledge of *Energy-10™*. Attend *the Designing Low-Energy Buildings with Energy-10™* Workshop in Pittsburgh, Pa., on May 20–21, 2005, and you will receive:

- The complete *Energy-10™* software package—a $300 value!
- Two days of in-depth instruction and software training

Who Should Attend?

- Practicing architects and engineers
- Students and professors or architecture
- Contractors and design/build firms
- Suppliers of energy efficiency components
- Building owners and managers
- Municipal purchasing agents, utility officials, and other public officials



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This event is sponsored by:

Pennsylvania Governor's Green Government Council

Green Building Alliance®
Smart solutions for the built environment

University of Pittsburgh

AIA Pittsburgh
A Chapter of The American Institute of Architects

Energy-10 was developed by:

NREL

Advancing a 'whole building' approach to design™

Sustainable Buildings Industry Council

New Features of *Energy-10™*

- One new Performance Summary Report provides simple energy-performance summaries and reflects the percentage change of going from building one to building two. Other performance reports include daylighting reports which show the standard daylighting factor calculated for each lighting zone. There is one report for each building.
- The Performance Summary Reports have been formatted to facilitate submission for energy and daylighting credits under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System® (USGBC). As long as the project can be modeled within the limitations of *Energy-10™* it can be considered for energy modeling.
- New instructions are provided for setting up an ASHRAE 90.1 1999 reference case.
- *Energy-10™* provides a comprehensive life cycle cost calculation.

New Building Design Case Study – RAFI Office Building, N.C. During the early stages of design, *Energy-10™* was used to model the building's energy consumption. Alicia Ravetto served as the project architect.

For More Information

Contact Doug Schroeder at (202) 628–7400 ext. 210 or DSchroeder@SBICouncil.org. Or, visit SBIC on the Web at **www.SBICouncil.org**.